

ABSTRACT OF THE DISCLOSURE

A synchronous controller capable of easily controlling a slave axis in synchronism with a master axis performing a composite motion of a plurality of axes. Motion commands for two axes X, Y constituting the master axis are subject to interpolation/distribution and acceleration/deceleration processing, to determine distribution motion amounts, and the determined amounts of motion of the two axes X, Y constituting the master axis for every interpolation period are combined to determine an amount of motion M of the master axis, from which is determined an amount of motion of the slave axis for every interpolation/distribution period. The determined amounts of motion of the X, Y and slave axes are output to respective servo control means, thus driving the respective axes. In case the master axis is constituted by a means driven by external X and Y axes, amounts of motion of the external X and Y axes for every predetermined period are detected by detectors, and used, instead of the distribution motion amount, to determine an amount of motion M of the master axis from which an amount of motion of the slave axis is determined to drive the slave axis.